

METHODS OF INCREASING POLYPEPTIDE ACCUMULATION IN PLANTS

ABSTRACT OF THE DISCLOSURE

5 The present invention provides methods and compositions directed to the production of polypeptides in plant protein storage tissue. Methods of the invention include methods for producing polypeptides in protein storage tissues by decreasing the level of protease activity in the plant protein storage tissue. Compositions of the invention include plants that are genetically modified such that the activity of one or
10 more proteases is reduced or eliminated, transformed seeds obtained from these genetically modified plants, and sequences encoding a novel member of the VPE cysteine protease family found in seed, ϵ -VPE. These methods and compositions find utility in altering the nutritional or other qualities of seed, and in producing useful proteins including pharmacological or industrial proteins.

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